AMENDMENTS TO THE DRAWINGS

The attached replacement sheet of drawings, including Figure 6, replaces the previously submitted sheet of drawings including Figure 6. More specifically, Applicant has amended Figure 6. The replacement sheet has been clearly labeled "Replacement Sheet" in the page header.

Attachment: 1 Replacement Sheet of drawings including Figure 6

REMARKS

Claims 11 and 13-16 are pending in the application. Claims 1-10 and 12 have been cancelled. Claims 11, 13, and 14 have been amended. Claims 11 and 16 are in independent form.

Information Disclosure Statement

The Examiner states that Great Britain Patent No. 512,273 has not been considered because the information disclosure statement filed July 12, 2005 fails to comply with 37 C.F.R. §1.98(a)(2). In response, Applicant submits herewith a copy of Great Britain Patent No. 512,273.

Specification

The Examiner states that "cross-sectional" on line 1 of paragraph 16 is confusing. In response, Applicant has deleted "cross-sectional" and inserted -- end --.

The Examiner states that "170A" and "170B" on line 15 of paragraph 33 should be changed to -- 140A -- and -- 140B -- respectively. In response, Applicant has added reference numbers "170A" and "170B" to Figure 6 to identify the third and fourth pulleys 170A, 170B, respectively.

The Examiner states that "248" on line 15 of paragraph 35 should be changed to -- 252 --. In response, Applicant has deleted "248" and inserted -- 252 --.

Thus, the objections to the disclosure are moot.

Drawings

Applicant has attached 1 replacement sheet of drawings hereto directly following these Remarks. The replacement sheet has been labeled "Replacement Sheet" in the page header as per 37 C.F.R. §1.121(d). Applicant attests no new matter has been added thereto.

In amended Figure 6, reference number "170A" has been moved to identify the third pulley 170A. Reference number "170B" has been added to identify the fourth pulley 170B.

Claim Rejections – 35 U.S.C. §112

Claims 1, 6, and 11-15 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant respectfully traverses the rejection.

Applicant has cancelled claims 1, 6, and 12.

The Examiner states that the recitation "first and second guide pulleys ... second rails" on lines 6-7 of claim 11 renders the claims indefinite. In response, Applicant has deleted this language from claim 11 and added -- a first guide pulley mounted to said first end of said first rail -- and -- a second guide pulley mounted to said second end of said second rail -- to clarify the claimed invention.

The Examiner also states that the recitation "and by additional means" on line 17 of claim 11 renders the claims indefinite. In response, Applicant has deleted this language from claim 11 and added -- a secondary cable -- to clarify the claimed invention.

The Examiner further states that the recitation "said first rail end" on lines 20-21 of claim 11 renders the claims indefinite. In response, Applicant has deleted this language from claim 11 and added -- said first end of said first rail ... -- to clarify the claimed invention.

Claims 13-15 depend from amended claim 11 and, as such, are construed to incorporate by reference all of the limitations of the claim to which they refer, *see* 35 U.S.C. §112, fourth paragraph.

Therefore, Applicant respectfully requests that the rejection of claims 1, 6, and 11-15 under 35 U.S.C. §112, second paragraph, be withdrawn.

Double Patenting

Claim 1 stands rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of Smith (U.S. Patent 6,796,085). In response, Applicant has cancelled claim 1. Thus, the nonstatutory obviousness-type double patenting rejection of claim 1 is moot.

Claims 2-10 stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of Smith in view of Morando (U.S. Patent 6,161,337). In response, Applicant has cancelled claims 2-10. Thus, the nonstatutory obviousness-type double patenting rejection of claims 2-10 is moot.

Claim Rejections – 35 U.S.C. §103

Claim 1 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Morando in view of Ward (U.S. Patent 5,309,679). In response, Applicant has cancelled claim 1. Thus, the rejection of claim 1 is moot.

Claims 2 and 4-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Price (U.S. Patent 1,457,316) in view of Beyerlein (U.S. Patent 5,528,861). In response, Applicant has cancelled claims 2 and 4-9. Thus, the rejection of claims 2 and 4-9 are moot.

Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Price in view of Beyerlein as applied to claims 2 and 4-9 above. In response, Applicant has cancelled claim 3. Thus, the rejection of claim 3 is moot.

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Price in view of Beyerlein as applied to claims 2 and 4-9 above. In response, Applicant has cancelled claim 10. Thus, the rejection of claim 10 is moot.

Claims 11, 12, 14, and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Morando in view of Ward. Applicant respectfully traverses the rejection.

The Examiner contends that "[i]t would have been obvious to one of ordinary skill in the art to provide Morando with lift pulleys, as taught by Ward, to double the amount of lifting force applied to the window." **First, the cited references do not disclose a primary cable having a first end anchored to a first end of a first rail and a second end anchored to a second end of a second rail, as specifically required by amended claim 11**. In Morando, one end of cable 35B is attached to a first slider 30 that slides on a first rail 21 and the other end of cable 35B is attached to a second slider 31 that slides on a second rail 22. In Ward, one end of an inner core 216a of Bowden cable 216 is anchored to a stationary fixing point 52a on an upper member of the door frame 12 and another end of the inner core 216a is anchored to a stationary fixing point 52b on a lower member of the door frame 12. In contrast, in the present application the at least one primary cable (132A, 132B) has a first end anchored (134A) to a first end of a first rail (112A) and a second end anchored (134B) to a second end of a second rail (112B). Thus, neither of the cited references disclose or teach a cable having a first end anchored to a first end of a first rail and a second end anchored to a second end of a second rail.

Second, the lift pulleys 50a and 50b in Ward are not mounted to lift plates that are slidingly mounted to rails, as specifically required by amended claim 11. Rather, the lift pulleys 50a and 50b in Ward are mounted directly to a lower portion of a window 10 which moves in guides 11 and 13. In contrast, first and second lift plate pulleys (136A, 136B) in the present application are mounted to first and second lift plates (116A, 116B) which are slidingly mounted to first and second rails (112A, 112B). Thus, there is no suggestion or contemplation to combine the lift pulleys 50a, 50b disclosed in Ward with the sliders 30, 31 disclosed in Morando apart from using Applicant's invention as a template through an improper hindsight reconstruction of Applicant's claims.

Applicant has cancelled claim 12.

Claims 14 and 15 depend from amended claim 11 and, as such, are construed to incorporate by reference all of the limitations of the claim to which they refer, *see* 35 U.S.C. §112, fourth paragraph. Amended claim 11 is allowable for the reasons set forth above. Thus, claims 14 and 15 are allowable.

Therefore, Applicant respectfully requests that the rejection of claims 11, 12, 14, and 15 under 35 U.S.C. §103(a) as being unpatentable over Morando in view of Ward be withdrawn.

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Morando in view of Ward, as applied to claims 11, 12, 14, and 15 above. Applicant respectfully traverses the rejection.

Claim 13 depends from amended claim 11 and, as such, is construed to incorporate by reference all of the limitations of the claim to which it refers, *see* 35 U.S.C. §112, fourth paragraph. Amended claim 11 is allowable for the reasons set forth above. Thus, claim 13 is allowable.

Therefore, Applicant respectfully requests that the rejection of claim 13 under 35 U.S.C. §103(a) as being unpatentable over Morando in view of Ward, as applied to claims 11, 12, 14, and 15 above be withdrawn.

Claim 16 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Russell (U.S. Patent 3,022,064) in view of Price. Applicant respectfully traverses the rejection.

The Examiner contends that "[i]t would have been obvious to one of ordinary skill in the art to provide Russell with lift pulleys, as taught by Price, to increase the amount of lifting force generated by the cable." **First, Russell does not disclose a lift plate mounted to slide along a rail, as specifically required by claim 16**. In Russell, cable attaching bracket 74 is fixed to a window carrying means 76 and a plate 78 is attached by screws 80 to the bracket 74 to clamp a cable 68 to the bracket 74 so that longitudinal movement of the cable 68 effects a similar movement of the bracket 74. There is no disclosure in Russell that bracket 74 is mounted to slide along mounting channel 14. In contrast, in the present application lift plate (316) is mounted to slide along rail (312). Thus, Russell does not disclose or teach a lift plate mounted to slide along a rail.

Second, the cited references do not disclose a cable having a first end anchored near a first end of a rail and a second end anchored near a second end of the rail, as specifically

required by claim 16. In Russell, cable 68 is wound around drum 56 several times in such a manner that one end of the cable 68 is attached in an opening 70 in a flanged portion of the drum 56 and the other end is attached in an opening 72 in the flanged portion of the drum 56. In Price, one end of cable R is anchored to plate E at P and another end of the cable R is anchored via a coiled spring S to the plate E. Plate E is secured to the inside of door A just below window opening B. Clearly, plate E is not equivalent to a rail extending between first and second ends that guides a lift plate between the first and second ends of the rail. In contrast, in the present application a cable (330) has a first end anchored (334a) near a first end of a rail (312) and a second end anchored (334b) near a second end of the rail (312). Thus, neither of the cited references disclose or teach a cable having a first end anchored to a first end of a rail and a second end anchored to a second end of the rail.

Third, the lift pulley N in Price is not mounted to a lift plate that is mounted to slide along a rail, as specifically required by claim 16. Rather, the sheave N in Price is mounted to a bracket M. Price does not disclose a rail. In contrast, lift pulley (336) in the present application is mounted to lift plate (316) which in turn is mounted to slide along rail (312). Thus, there is no suggestion or contemplation to combine the lift pulley N disclosed in Price with the bracket 74 disclosed in Russell apart from using Applicant's invention as a template through an improper hindsight reconstruction of Applicant's claims.

Therefore, Applicant respectfully requests that the rejection of claim 16 under 35 U.S.C. §103(a) as being unpatentable over Russell in view of Ward be withdrawn.

It is respectfully submitted that this patent application is in condition for allowance, which allowance is respectfully solicited. If the Examiner has any questions regarding this amendment or the patent application, the Examiner is invited to contact the undersigned.

The Commissioner is hereby authorized to charge any additional fee associated with this Communication to Deposit Account No. 50-1759. A duplicate of this form is attached.

Respectfully submitted,

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Date: Dec. 1, 2009
Attorney Docket No: 19339-102165

PATENT SPECIFICATION

Application Date: May 21, 1938. No. 15234/38. 512,273

Complete Specification Left: May 18, 1939.

Complete Specification Accepted: Aug. 31, 1939.

PROVISIONAL SPECIFICATION

Improvements relating to Window Raising and Lowering Mechanism

We, WILMOT-BREEDEN LIMITED, a Company duly incorporated under the Laws of Great Britain, of Eastern Works, Camden Street, in the City of Birmingham, 1, and ARTHUR SMYE, a British Subject, of the Company's address, do hereby declare the nature of this invention to be as follows:—

This invention has for its object to provide improved window raising and lowering mechanism, and particularly mechanism of this kind for motor vehicle windows.

The invention comprises the combination of a guide adapted to be mounted vertically or substantially vertically beneath or in any other convenient position relatively to the window, a slide mounted on the guide and adapted for connection with the window, a pair of pulleys at or near the ends of the guide, hand operable means for actuating one of these pulleys, another pulley on the slide, and a flexible member, such as a wire cable, this member being arranged to pass around the pulleys on the guide and slide and being also secured to the slide.

In one manner of constructing in accordance with this invention a raising and lowering mechanism for a motor vehicle window, we employ a guide made from sheet metal and having its longitudinal edges bent over to receive the edges of a slide which is movable in the guide. The guide is adapted to be mounted on the door beneath the window or in any other convenient position relatively to the window. When applied to the door the guide is arranged in a vertical or substantially vertical position.

At or near the upper end of the guide is mounted a pulley which is rotatable by a handle, and at or near the lower end of the guide is mounted another pulley. Preferably the latter pulley is carried on a plate slidable on the guide and is secured by an adjusting screw. Instead of the lower pulley a fixed arcuate guide may be used, and we desire it to be understood that in this connection such a guide is included by the term pulley.

On the slide is mounted another pulley, and the slide is also provided with any convenient means for effecting connection with and supporting the weight of the window.

In combination with the pulleys above-mentioned we employ any convenient flexible member such as a cord, leather band, but preferably a wire cable. This member passes around all the pulleys. Preferably it is coiled several times around the hand operable pulley to ensure sufficient frictional grip on that pulley, and one or more times around the slide pulley. As regards the other pulley on the slide it is only necessary for the flexible member to subtend its lower half, although if desired it may be coiled one or more times around this pulley as well. The ends of the flexible member are anchored to the slide.

If desired an endless wire cable or other suitable flexible member as aforesaid may be used, this being mounted on the pulleys as above described and having one part anchored to the slide.

For some purposes it may be desirable to employ a chain or a perforated steel tape as the flexible member, in which case toothed or sprocket pulleys would be used on the guide and slide.

Movement of the slide on the guide for raising or lowering the window is effected by rotation of the handle on one of the guide pulleys, this rotation having the effect of transmitting motion to the slide through the flexible member.

By means of this invention we are able to provide a mechanism for raising and lowering a window and for holding the window in any desired position, in a very simple and convenient form.

The invention is not limited to vehicle windows, as it may (with appropriate modification of detail if necessary) be applied to other windows.

Dated this 20th day of May, 1938.

MARKS & CLERK.

[Price 1/-]

Price

COMPLETE SPECIFICATION

Improvements relating to Window Raising and Lowering Mechanism

We, WILMOT-BREEDEN LIMITED, a Company duly incorporated under the Laws of Great Britain, of Eastern Works, Camden Street, in the City of Birmingham, 1, and ARTHUR SMYE, a British Subject, of the Company's address, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention has for its object to provide improved window raising and lowering mechanism, and particularly mechanism of this kind for motor vehicle windows.

The invention comprises the combination of a guide adapted to be mounted vertically or substantially vertically beneath or in any other convenient position relatively to the window, a slide mounted on the guide and adapted for connection with the window, a pair of pulleys at or near the ends of the guide, hand operable means for actuating one of these pulleys, another pulley on the slide, and a flexible member, such as a wire cable, this member being arranged to pass around the pulleys on the guide and slide, and being also secured to the slide.

In the accompanying sheet of explanatory drawings:—

Figures 1 and 2 are respectively a part sectional side elevation and a rear elevation of mechanism constructed in accordance with the invention for raising and lowering a motor vehicle window.

Figure 3 is a section on the line 3.3 of Figure 2.

In carrying the invention into effect as shown, we employ a guide *a* made from sheet metal and having its longitudinal edges bent over to receive the edges of a slide *b* which is movable in the guide. The guide *a* is adapted to be mounted on the vehicle door (not shown) beneath the window *c* or in any other convenient position relatively to the window. When applied to the door the guide *a* is arranged in a vertical or substantially vertical position.

At or near the upper end of the guide *a* is mounted a pulley *d* which is rotatable by a handle *e*, and at or near the lower end of the guide is mounted another pulley *f*. Preferably and as shown the pulley *f* is carried on a plate *g* which is slidably adjustable in the guide *a* under the action of an adjusting screw *h*. Instead of the lower pulley *f* a fixed arcuate guide may be used, and we desire it to be understood that in this connection such a guide is included by the term pulley.

The slide *b* has mounted on it another pulley *m*, and is provided with any convenient means for effecting connection with and supporting the weight of the window *c*. Such means, in the example shown, comprises a short stem *i* on which the pulley *m* is mounted, and which is secured at one end to the slide *b*, the other end of the stem being adapted to extend through a slotted bracket *j* on a channel-shaped member *k* accommodating the lower edge of the window *c*.

In combination with the pulleys *d*, *f*, *m* we employ any convenient flexible member *n* such as a cord, leather band, but preferably a wire cable. This member *n* passes around all the pulleys *d*, *f*, *m*. Preferably it is coiled several times around the hand operable pulley *d* to ensure sufficient frictional grip on that pulley, and one or more times around the slide pulley *m*. As regards the other pulley *f* on the guide *a* it is only necessary for the flexible member *n* to subtend its lower half, although if desired it may be coiled one or more times around this pulley as well. The ends of the flexible member *n* are anchored to lugs *o* on the slide *b*.

If desired the flexible member may be formed by an endless wire cable or the like, this being mounted on the pulleys as above described and having one part anchored to the slide.

For some purposes it may be desirable to employ a perforated steel tape as the flexible member, in which case toothed or sprocket pulleys would be used on the guide and slide.

Movement of the slide *b* in the guide *a* for raising or lowering the window *c* is effected by rotation of the handle *e* on the guide pulley *d*, this rotation having the effect of transmitting motion to the slide through the flexible member *n*.

By means of this invention we are able to provide a mechanism for raising and lowering a window and for holding the window in any desired position, in a very simple and convenient form.

The invention is not limited to vehicle windows, as it may (with appropriate modification of detail if necessary) be applied to other windows.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. Window raising and lowering mechanism comprising the combination of a guide adapted to be mounted vertically or substantially vertically beneath or in any other convenient position relatively to the window, a slide mounted on the guide and adapted for connection with the window, a pair of pulleys at or near the ends of the guide, hand operable means for actuating one of these pulleys, another pulley on the slide, and a flexible member, such as a wire cable, this member being arranged to pass around the pulleys on the guide and slide and being also secured to the slide.

2. Window raising and lowering mechanism as claimed in Claim 1 and comprising the combination and arrangement of parts substantially as described and as illustrated in the accompanying drawings.

Dated this 9th day of May, 1939.

MARKS & CLERK.

Leamington Spa: Printed for His Majesty's Stationery Office, by the Courier Press.—1939.

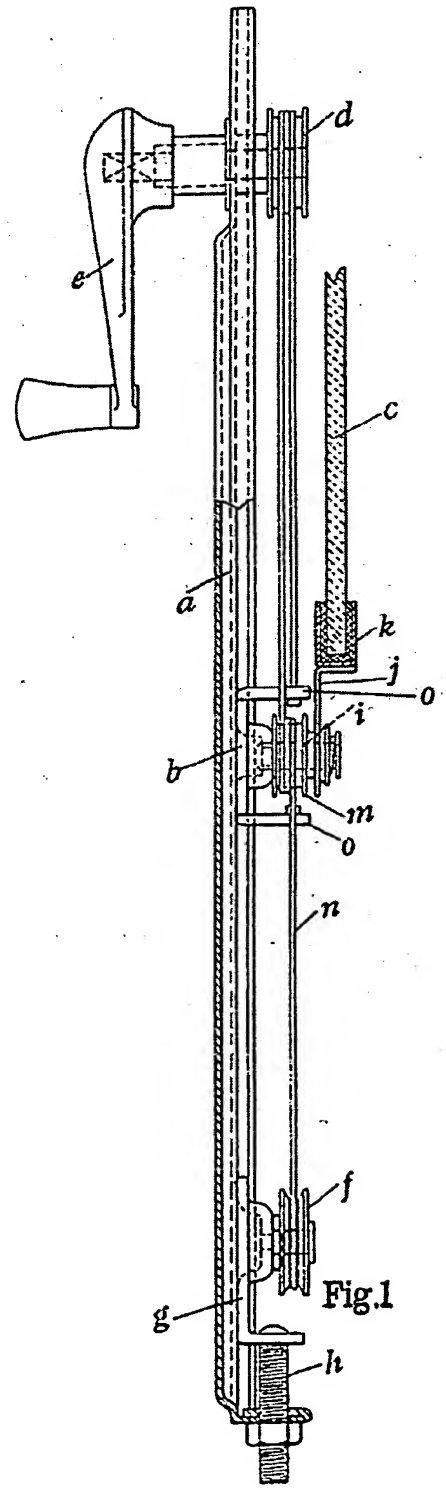
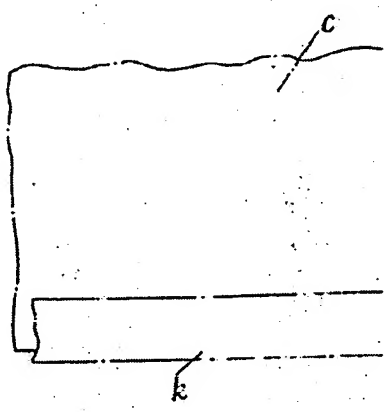


Fig.1



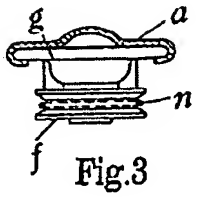


Fig.3

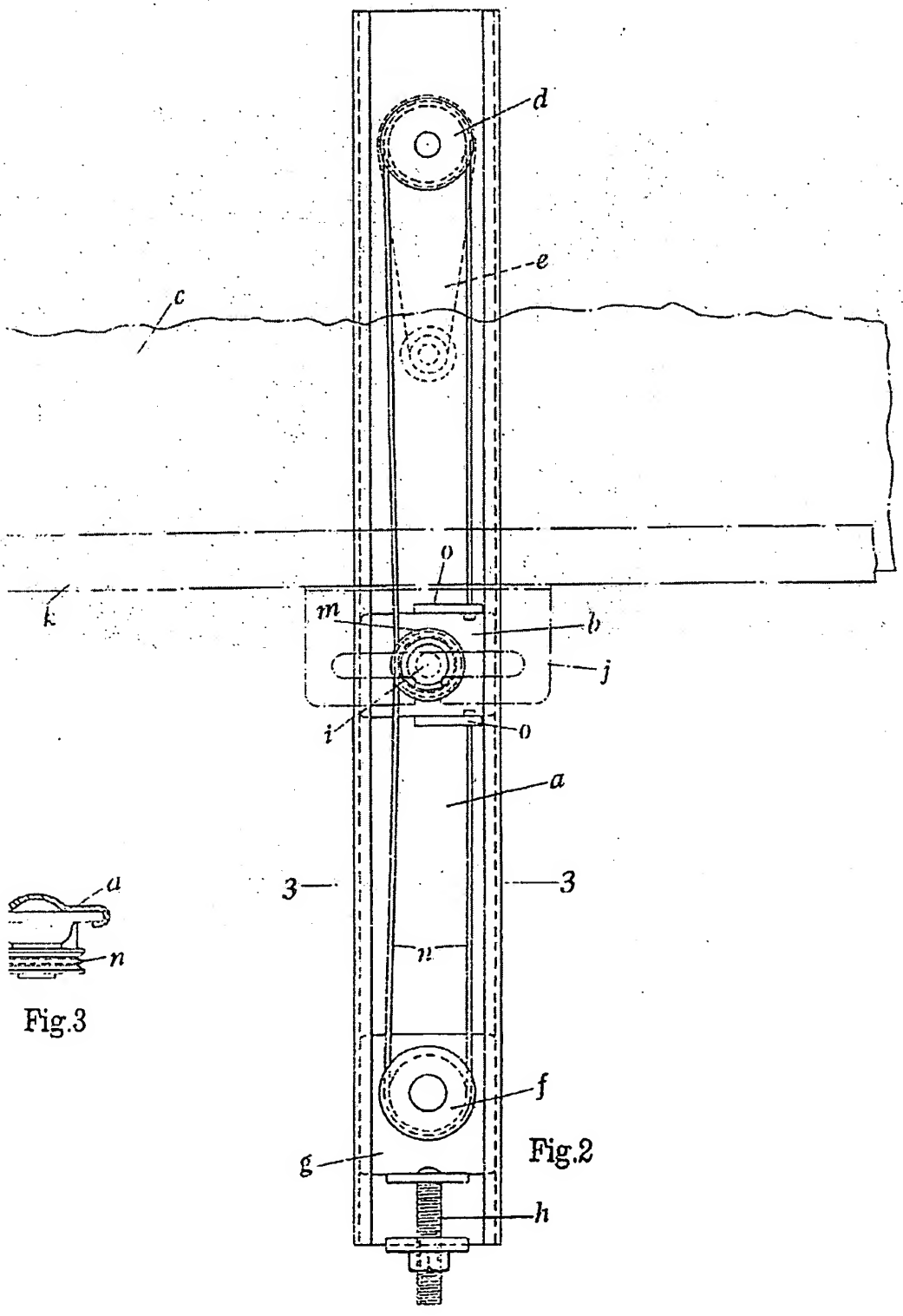


Fig.2

Fig.3

Malby & Sons, Photo-Lith.

512,273 COMPLETE SPECIFICATION 1 SHEET

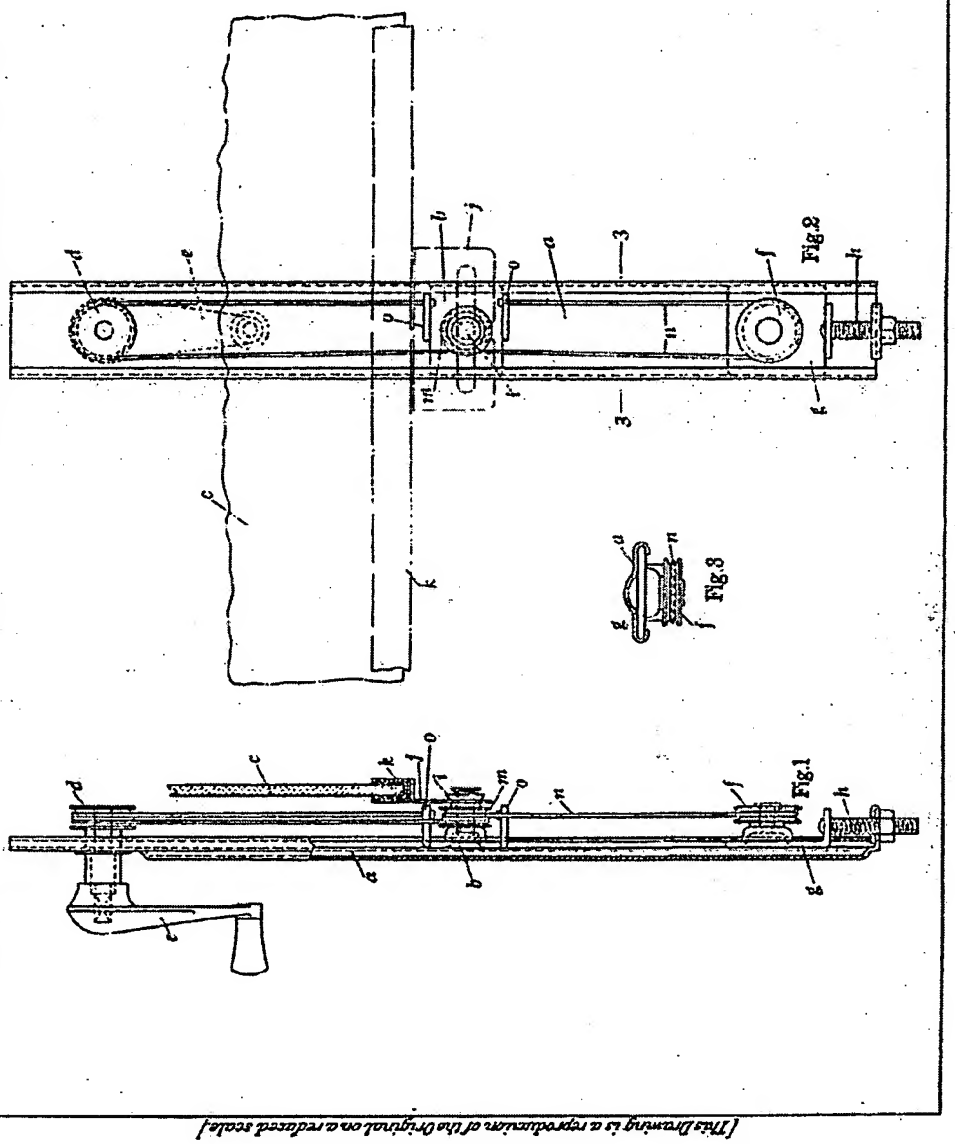


Fig.2

Fig.3

Fig.1